

Remarks

I. Introduction

Claim 83 has been amended. Claims 84-87, 89, and 90 are also in the case. All other claims have either been cancelled or withdrawn. Reconsideration of this application is respectfully requested in light of the following further remarks.

II. The Rejections Based on 35 U.S.C. § 103

Claim 83, and its dependent claims 84-87, 89, and 90, have been rejected under 35 U.S.C. § 103 as obvious from Kaster et al. U.S. patent 5,234,447 (hereinafter "Kaster") and Yencho et al. U.S. patent 6,206,913 (hereinafter "Yencho"). These rejections are respectfully traversed.

Applicants do not accept several of the Office action's statements about what the references show. However, applicants believe that the further amendments they have made to claim 83 will make it readily apparent that the invention defined in that claim (and its dependent claims) is not obvious from Kaster and Yencho.

A. Arguments Based on the Current Amendments

Claim 83 has been amended to state that each of the closed shapes previously defined in claim 83 is "connected to a next adjacent closed shape in said row along only a central portion of a length of a side of said shape that is

transverse to said direction." Yellow highlighting is used on the attached copy of applicants' FIG. 21(a) to highlight the connections thus referred to.

The importance of this feature of applicants' invention is as follows. By connecting adjacent cells 82g/84g only at the central portion of the sides of those cells, expansion of the cells in the annular direction can cause the inner-most circumference of the entire structure to enlarge. Similarly, compression of the cells in the annular direction can cause the inner-most circumference of the entire structure to reduce. Put another way, this construction means that no part of the entire structure has a circumference that is fixed in size. All parts of the structure can annularly enlarge or annularly shrink.

The above is not true for the structures shown by Yencho.

Yencho has been cited for showing rows of closed shapes with open centers. Only the embodiments shown in Yencho FIGS. 12-29 arguably include such construction. (Yencho FIGS. 1-11 are not relevant to the present discussion.) But in each and every Yencho embodiment having rows of closed shapes, adjacent ones of those closed shapes are connected at the ends of their sides, not only at central portions of their sides. The result is that portions of

every Yencho embodiment are of fixed circumferential size. In the attached copies of several FIGS. from Yencho the portions of the Yencho structures that are of fixed circumferential size are highlighted in pink.

The foregoing demonstrates that no part of what Yencho shows is constructed in the way that applicants now specify in claim 83. In particular, Yencho does not show a row of closed shapes that are connected to one another only at central portions of the sides of those shapes that are transverse to the structure's overall annular direction. The Office action admits that Kaster does not show anything pertinent to applicants' row of closed shapes. Therefore, the structure now specified in claim 83 cannot be derived from either Kaster or Yencho or any combination of those references. Claim 83 is thus not obvious from Kaster and Yencho, and claim 83 and its dependent claims 84-87, 89, and 90 should accordingly be allowed.

B. Other Arguments

Applicants believe that the foregoing is sufficient to demonstrate the allowability of claims 83-87, 89, and 90. In addition, however, applicants feel that they should point out what they believe to be mischaracterization of Kaster and Yencho in the Office action. For example, Kaster does not in fact show several of the features of applicants' claim 83

that the Office action says it shows. These features are as follows:

1. Kaster's structure 12 is not "annularly continuous" as required by applicants' claim 83. To the contrary, Kaster's structure 12 has an interruption, which is clearly shown in FIG. 10 of Kaster (see the attached annotated copy of that FIG.).

2. Kaster's first and second members are not "resiliently biased to extend substantially radially out from the structure" as required by applicants' claim 83. On the contrary, all of Kaster's members 43 and 44 require plastic deformation by forming tools like 38, 39, and 13 in order to extend radially out from connecting unit 46.

3. Kaster's first and second members are not "elastically deflectable substantially parallel to a central longitudinal axis of the structure" as required by applicants' claim 83. On the contrary, Kaster's members 43 and 44 start out in the same plane as connecting unit 46 (see Kaster's FIGS. 8 and 9), and these members are then plastically deformed out of that plane. This plastic deformation is not reversible by elastic deflection. If something bends plastically in one direction, it is only going to bend back plastically, not elastically.

With regard to Yencho, the Office action says that this reference teaches the use of nitinol. Applicants do not dispute that general assertion. But applicants believe that Yencho's teachings of this kind apply to Yencho's FIGS. 1-11 embodiments, which are not relevant to applicants' invention. Only Yencho's FIGS. 12-29 embodiments are arguably relevant to the present invention, and in connection with these FIGS., Yencho does not repeat the earlier references to "superelastic", "NiTi alloy", or "nickel titanium alloys." At column 13, line 66, through column 14, line 2, Yencho does say, with regard to the FIGS. 12-29 embodiments, "The large vessel stent is preferably formed from stainless steel. However, other suitable materials may be used, including tantalum, titanium, and alloys thereof." But applicants believe that Yencho's FIGS. 12-29 embodiments operate primarily, if not entirely, by plastic (not elastic) deformation of the large vessel stent. This may account for why Yencho does not again mention "superelastic", "NiTi alloy", or "nickel titanium alloys" in connection with the FIGS. 12-29 embodiments.

It is Yencho's FIGS. 12-29 embodiments that the Office action is attempting to combine with Kaster to show applicants' invention. But applicants believe that this is just an attempt by the Examiner to put two plastic structures

together to show applicants' elastic structure. Applicants do not believe that this can properly be done. In other words, although Yencho mentions NiTi alloy and the like, applicants believe that Yencho really teaches this only in connection with Yencho's otherwise irrelevant (FIGS. 1-11) embodiments. Kaster is plastic, and applicants believe that Yencho FIGS. 12-29 are also plastic. Combining these two plastic structures is not a proper basis for saying that applicants' elastic structure is obvious. These are additional reasons why claims 83-87, 89, and 90 are not obvious from Kaster and Yencho.

III. Conclusion

The foregoing demonstrates that claims 83-87, 89, and 90 are allowable. All other claims have been either cancelled or withdrawn. This application is therefore in condition for allowance, which is earnestly solicited.

Respectfully submitted,



Robert R. Jackson
Registration No. 26,183
Attorney for Applicants
ROPES & GRAY LLP
Customer No. 1473
1211 Avenue of the Americas
New York, New York 10036-8704
Tel.: (212) 596-9000
Fax: (212) 596-9090